(19) World Intellectual Property Organization International Bureau



(43) International Publication Date 20 January 2005 (20.01.2005)

PCT

(10) International Publication Number WO 2005/005572 A1

(51) International Patent Classification7: 19/40

C09K 19/32,

(21) International Application Number:

PCT/EP2004/007089

(22) International Filing Date: 30 June 2004 (30.06.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 03 015 731.7

10 July 2003 (10.07.2003)

- (71) Applicant (for all designated States except US): MERCK PATENT GMBH [DE/DE]; Frankfurter Strasse 250, 64293 Darmstadt (DE).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): GOULDING, Mark, John [GB/GB]; 50 Seymour Road, Ringwood, Hampshire BH24 1SH (GB). THOMPSON, Marcus [GB/GB]; 7 Caroline Avenue, Mudeford, Christchurch, Dorset BH23 3JR (GB). DUFFY, Warren [GB/GB]; 75 Suffolk Road, Flat 1, Hampshire, Southampton SO15 5EF (GB). HEENEY, Martin [GB/GB]; 59 Cedar Road, Southampton SO14 6TQ (GB). MCCULLOCH, Iain [GB/GB]; 2 Goodacre Drive, Chandlers Ford, Southampton S053 4LG (GB).

- Common Representative: MERCK PATENT GMBH; Frankfurter Strasse 250, 64293 Darmstadt (DE).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: SUBSTITUTED ANTHRACENES

(57) Abstract: The invention relates to novel 9- and/or 10-substituted anthracenes, to their use in liquid crystal, light-emitting or semiconducting materials and devices, in anisotropic polymers, optical, electrooptical, decorative, security, cosmetic, diagnostic, electric, electronic, charge transport, semiconductor, optical recording, electroluminescent, photoconductor or electrophotographic applications, and to liquid crystal, light-emitting and semiconducting materials, polymers and devices comprising them.